

Abstract

An antenna structure for an inductively coupled plasma generator suitable for processing large-diameter wafers or large, flat-panel display devices by making a plasma density distribution uniform and symmetrical with respect to a rotating direction inside a circular or rectangular chamber in which a wafer is processed. In the antenna structure having a powered end to which RF power is applied and a ground end connected to the ground, at least two loop antenna elements are disposed electrically in parallel with each other, the powered ends and ground ends of the respective antennas are disposed symmetrically with respect to the center of the antennas, and the antennas crossing each other such that the powered ends and ground ends thereof are disposed at a part far from a chamber and central parts thereof are disposed at a part close to the chamber.